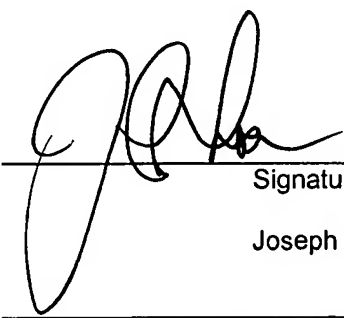




PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)
		1035-472
Application Number	Filed	
10/670,244	September 26, 2003	
First Named Inventor		
DOTTA et al.		
Art Unit	Examiner	
2826	Andujar, L.	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> Applicant/Inventor</p> <p><input type="checkbox"/> Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> Attorney or agent of record      37,515 (Reg. No.)</p> <p><input type="checkbox"/> Attorney or agent acting under 37CFR 1.34. Registration number if acting under 37 C.F.R. § 1.34 _____</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*</p> <p><input checked="" type="checkbox"/> *Total of 1 form/s are submitted.</p>		



Signature

Joseph A. Rhoa

Typed or printed name

703-816-4043

Requester's telephone number

January 30, 2006

Date

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and selection option 2.



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

DOTTA et al.

Atty. Ref.: 1035-472; Confirmation No. 8593

Appl. No. 10/670,244

TC/A.U. 2826

Filed: September 26, 2003

Examiner: Andujar, L.

For: SEMICONDUCTOR DEVICE AND CHIP-STACK SEMICONDUCTOR DEVICE

\* \* \* \* \*

January 30, 2006

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Pursuant to the OG Notice of July 12, 2005, applicant hereby requests a pre-appeal brief review of this case for at least the following reasons.

**REMARKS**

Pursuant to the OG Notice of July 12, 2005, applicant hereby requests a pre-appeal brief review of this case for at least the following reasons.

Claim 1 stands rejected under Section 103(a) as being allegedly unpatentable over Terui in view of Gnadinger. This Section 103(a) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires that “*said first through electrode and said second through electrode have mutually differing cross-sectional areas in a common horizontal plane transverse to a through-hole direction.*” For example, different through electrodes (e.g., 8a and 8c) in Figs. 1-2 of the instant application have different cross sectional areas in a common horizontal plane transverse to the through-hole direction. By adopting a through electrode of larger cross-sectional area in a common horizontal plane for an electrode that is to pass a greater amount of current, for example and without limitation, it is possible to reduce resistance of the through electrode thereby suppressing heat generation, signal delay, and/or the like. The cited art fails to disclose or suggest the above quoted feature of claim 1.

The Office Action's alleged modification to Terui based on Gnadinger is incorrect for at least the following reasons. Terui, in Fig. 5B, requires that electrodes 181, 183, 285 and 287 be connected to electrodes 81-87 at a *peripheral* portion of substrate 10 via wirings 90. Clearly, electrodes 181, 183, 285 and 287 of Terui are *not* through electrodes as required by claim 1. Moreover, wirings 90 are needed in Terui so that the electrodes 181, 183, 285 and 287 can be electrically connected to the electrodes 81-87. Recognizing that Terui fails to disclose or suggest the “through electrodes” required by claim 1, the Office Action cites to Gnadinger.

However, given that electrodes 181, 183, 285 and 287 in Terui must be connected to electrodes 81-87 at a peripheral portion of substrate 10 via external wirings 90, one of ordinary skill in the art would never have modified Terui as alleged in the Office action to make electrodes 181, 183, 285 and 287 through electrodes as called for in claim 1. There is simply no suggestion or motivation in the art for doing this. If flat planar electrodes 181, 183, 285 and 287 in Fig. 5 of Terui were modified to be through electrodes, their bottom ends would be buried in insulator 70 in Fig. 5B of Terui and no electrical connection could be made to electrodes 81-87, thereby destroying the functionality and purpose of Terui's device. Thus, the alleged modification would destroy the functionality of the base reference. Accordingly, all Section 103(a) rejections based on this combination of Terui and Gnadinger are flawed for at least this reason.

In the Advisory Action dated December 20, 2005, the Examiner states that "[i]n response to applicant's arguments against the reference individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of the reference." This statement by the Examiner is misapplied. In this case, the applicant is not attacking the references individually. Instead, as explained above, the applicant is attacking the combination alleged by the Examiner. In particular, the alleged modification would destroy the functionality of the base reference for the reasons explained above; thus, the alleged combination would never have been made and is certainly not suggested in the cited art.

The Section 103(a) rejection of claims 13, 14 and 29 are flawed for the reasons discussed above. In particular, the alleged modification to Terui is fundamentally flawed and would never have been done because the functionality of the base reference would be destroyed.

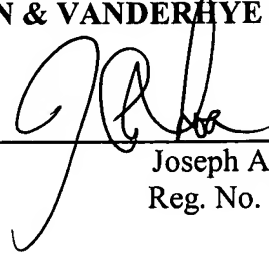
DOTTA et al.  
Appl. No. 10/670,244  
January 30, 2006

It is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

**NIXON & VANDERHYTE P.C.**

By: \_\_\_\_\_



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